Melting of glaciers

†2140. SHRI SATYAVRAT CHATURVEDI:
SHRI MOTILAL VORA:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether it is a fact that more cracks are appearing in the Himalayan glaciers and they are melting slowly;

(b) if so, the reasons therefor; and

(c) the steps being taken by Government to deal with this situation?

THE MINISTER OF EARTH SCIENCES (SHRI KAPIL SISAL): (a) Yes Sir. Glaciers, in general, including the Himalayan glaciers, are receding. Geological Survey of India (GSI) has been conducting studies on the recession of the Gangotri glacier since 1935. In eastern Himalayas, which sit in the Ganga basin, have reported glacier melts.

The rate of shrinking of 30.2 km-long Gangotri Glacier in the last three decades has been found to be more than the rate during the earlier decades. Average recession for this period is about 25 meter/year (83 feet/year). Wadia Institute of Himalayan Geology (WIHG) is studying the melting of Himalayan Glaciers in the Garhwal Himalaya, namely, Dokriani and Chorabari glaciers. The Dokriani and Chorabari glaciers have been receding at an average rate of 17.5 m/year between 1991 and 2005, and 10 m/year between 2003 and 2006 respectively.

(b) The melting of glaciers, as observed, the rate being larger in the last 3 decades is attributed to the phenomenon of global warming.

(c) Department of Science and Technology (DST) is planning to establish a specialized research centre at the national level for initiating scientific studies on Himalayan Glaciology including the effective monitoring all important glaciers and to work out options to effectively deal with the emerging situation with increased snow melts in the future.

Research in the Arctic circle

2141. SHRI MAHENDRA MOHAN:
SHRI V. HANUMANTHA RAO:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether Government have made any effort to focus and activate research in the Arctic Circle, to make claims for its oil and other wealth;

(b) whether Government have noted the hyper activism of some countries to gain a foot-hold in the Arctic Circle;

(c) what steps would be taken to intensify effort to send more teams and strengthen India's claims; and

†Original notice of the question was received in [illegible]

(d) the details of steps proposed to secure some rights to the un-populated and ambiguous status of the Arctic Circle?

THE MINISTER OF EARTH SCIENCES (SHRI KAPIL SIBAL): No, Sir. India has sent this year its first team of scientists to Arctic to initiate research on atmospheric sciences, glaciology, geology and marine biology. The main focus of research is to increase our understanding about weather and global climate change processes.

(b) to (d) The Government has seen media reports in this regard. Such matters are governed by an International Treaty - the United Nations Convention on Law of the Sea (UNCLOS) which does not allow claims beyond the limits of national jurisdiction and all signatory nations including India are bound by this Convention. The purpose of sending the scientific team to Arctic is primarily to undertake research.

Development for controlling the flood problems

2142. SHRI URKHAO GWRA BRAHMA Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the Ministry has developed any method or formula to control the flood problem of the country, particularly in Assam and Bihar, that has challenged our economy;

(b) whether this problem can be linked with environmental problem that caused human miseries; and

(c) if so, the details thereof?

THE MINISTER OF EARTH SCIENCES (SHRI KAPIL SIBAL): (a) No Sir. However, India Meteorological Department (IMD) of Ministry of Earth Sciences (MoES) generates river basin scale quantitative precipitation estimates (QPF) in short range (24-72hrs) which is utilised by the Central Water Commission (CWC). Currently, daily Monsoon Watch carried out with the rainfall records manually received from States and CWC (from 945 stations covering 62 river basins) are used for assessment of monsoon rainfall scenario.

IMD is expanding rainfall monitoring network in its modernization plan by adding 1350 Automatic Rain Gauges (ARGs). This is in addition to specific networks set up by States and SWC.

Action plans developed based on the Guidelines on Management of Floods will address the issues related to the flood control in the country including Assam and Bihar.

(b) No Sir.

(c) Does not arise.